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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: **Joseph DOMES**

Serial No.: **10/758,492** Examiner: **A. Gantt**

Filed: **January 15, 2004** Group Art Unit: **2684**

For: **RUGGEDIZED TRADEWORKERS RADIO**

Assistant Commissioner for Patents
Washington, DC 20231

**RESPONSE TO OFFICE ACTION AND INFORMATION DISCLOSURE STATEMENT**

I, Adan Ayala, Reg. No. 38,373, certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on June 24, 2005

Adan Ayala

Dear Sir:

This is in response to an Office Action mailed on April 19, 2005.

Currently in the above-identified application are Claims 21-24 and 26-44.

Personal Interview Summary

Applicant would like to extend his sincere thanks to the Examiner for conducting a personal interview on March 31, 2005 with the undersigned Applicant's attorney.

During the interview, Applicant's attorney informed the Examiner of the existence of two patents issued to Roger Smith, United States Patent Nos. 6,496,688 ("Smith '688") and

6,427,070 ("Smith '070"), which are both entitled "Heavy-Duty Audio Equipment." Applicant's attorney informed the Examiner that Smith '070 belongs to a line of patent applications and issued patents based on the inventions by Roger Q. Smith, which were assigned to Black & Decker, the assignee in the present application.

The Examiner was also informed as to the existence of two other patents, United States Patent Nos. 6,308,059 ("Domes '059") and 6,788,925 ("Domes '925"), both entitled "Ruggedized Tradesworkers Radio," issued to Joseph Domes, the present Applicant. Applicant's attorney informed the Examiner that the presently-pending application belongs to a line of patent applications and issued patents based on the inventions by Joseph Domes.

Applicant's attorney informed the Examiner that this pending application was filed by Black & Decker on January 15, 2004 and is a continuation application to Domes '059. Applicant's attorney further informed the Examiner that each of the above patents, as well as the presently-pending application, are currently assigned to Black & Decker Inc.

Applicant's attorney apprised the Examiner of a pending litigation between Black & Decker and Bosch involving only Domes '059 and Domes '925, Black & Decker Inc. v. Robert Bosch Tool Corporation, Civil Action No. 04 C 7955 (U.S. District Court for the Northern District of Illinois).

During the interview, Applicant's attorney notified the Examiner that the pending claims were not copied from either Smith '688 or Smith '070, but were variations of the claims from those patents. In particular, the claims in the presently-pending application were originally the

same as those in Smith '688 and Smith '070, but these originally filed claims were narrowed, thus constituting the claims now pending.

Applicant's attorney explained to the Examiner that Domes '059, Domes '925, Smith '070 and Smith '688, as well as the presently-pending application are owned by Black & Decker Inc. Applicant's attorney and the Examiner discussed the common ownership and Applicant's attorney stated that the claims should be allowable.

The interview lasted approximately 60 minutes. Once again, Applicant would like to thank the Examiner for providing Applicant with the opportunity to discuss these matters.

Response to Office Action Rejections

The Examiner rejected Claims 21-23, 28-32 and 36-44 under the doctrine of obviousness-type double patenting as being unpatentable over Claims 1-12 of Smith '688. In response, Applicant hereby files a terminal disclaimer disclaiming the period of Smith '688 extending beyond the patent term of the present application, as Smith '688 has an effective filing date which is later than the earliest filing date of the present application.

In addition, the Examiner rejected Claims 24, 26-27 and 33-35 under the doctrine of obviousness-type double patenting as being unpatentable over Claims 1-3 of Smith '070. In response, Applicant hereby files a terminal disclaimer disclaiming the period of Smith '070 extending beyond the patent term of the present application, as Smith '070 has an effective filing date which is later than the earliest filing date of the present application.

Information Disclosure Statement

In compliance with 37 CFR §§1.56, 1.97(c) and 1.98, Applicant hereby requests that the documents listed on the attached form PTO-1449 be made of record in the above-identified application. Copies of the listed documents are attached hereto.

All the listed documents have been identified by Robert Bosch Tool Corporation ("Bosch") in the above-mentioned litigation involving Domes '925 and Domes '059. Specifically, on May 9, 2005, and as part of the litigation, Black & Decker Inc. v. Robert Bosch Tool Corporation, Case No. 04 C 7955 (U.S. District Court for the Northern District of Illinois), Bosch wrote a letter identifying a list of prior art it believed to be relevant with respect to Domes '925 and Domes '059 patents (Exhibit 1).

On May 24, 2005, in this same lawsuit, Bosch responded to Black & Decker's interrogatory no. 3 regarding invalidity as follows:

Interrogatory No. 3:

> Describe in detail the factual bases supporting any allegation, defense, claim or counterclaim that any claim of the '059 patent or the '925 patent is invalid for alleged failure to comply with 35 U.S.C. §§ 101, 102, 103 and/or 112.

Answer:

> Bosch incorporates its General Objections. Bosch further objects to this interrogatory to the extent that it is premature. Bosch repeats and incorporates herein its objections to Interrogatory No. 2.
>
> Subject to these objections, Bosch will produce documents presently known to Bosch pursuant to Rule 33(d) from which the information requested can be obtained.

First Amended Answer:

Bosch maintains its objections. Subject to these and the General Objections, Bosch states that the '059 and '925 patents are valid under §102 and/or §103 based upon the following prior art references: (1) Grundig Satellit 700: B00089-B00134; (2) Signal Manportable Communications: B00045-00088; and (3) U.S. Patent No. 4,751,452. These references have been or will be produced in accordance with Rule 33(c). Bosch expressly reserves the right to supplement and/or change its response to this interrogatory after the court has construed necessary claim terms and after Bosch has completed its investigation.

(Exhibit 2).

Many documents provided by Bosch are not in English. Bosch did not provide Applicant or Black & Decker any translations of such non-English documents. Other than those already provided translations, neither Applicant nor Black & Decker have any translations of such non-English documents. For the sake of completeness, Applicant hereby provides abstracts of such non-English documents, where available. These abstracts have been published by different databases, as identified in each case, and should not be considered to constitute Applicant's or Black & Decker's interpretation of the non-English documents.

DE69803432T—Because the abstract for this reference is not available in the EPO database, provided herein is the abstract for the corresponding European document (EP0921605): The present utility model pertains to an electrical outlet or plug for industrial and/or tertiary use, which comprises a body (10) consisting of two complementary elements and is provided with a spring-like stopping means in the form of a spring-like tongue (16), which forms a single piece with one of the elements of the body and engages, by springing, with a support shoulder (19) on the other element of the body. Source: EPO database (ep.espacenet.com)

DE7342534-Because the abstract for this reference is not available in the EPO database, provided herein is the abstract for the corresponding European document (GB1445880): 1445880 Two part coupling BLACK & DECKER MFG CO 6 Dec 1973 [21 Dec 1972] 56638/73

Heading H2E To connect a power line 43 to an appliance 11 with means for mechanically locking the con- nection, receptacle insulating member 35 with two flat pins 33 and 31 (not shown) in its recess is mounted on the appliance, trapped between handle body 15 and cover 37, and a mating cruciform insulating plug member 45 with flat sockets (47, 49, Fig. 4, not shown) is fitted to the line 43. For locking, partially rotatable ring 79 is held in grooves 81, 83 in handle 15 and cover 37 respectively, rotated by finger pieces 85, 87 projecting through slots 89, 91; detent pin 93 springing into recess 95 or 97 locates the ring. With pin 93 in recess 95, lugs (109 and 107, Fig. 4, not shown) on the plug member can pass through the ring, allowing disengagement; with pin in recess 97 and connectors engaged the lugs are trapped behind shoulders 111, 113 on the ring. To provide permanent engagement, the ring may be fitted over the plug member and assembled into the appliance rotated through 180 degrees, the detent pin 93 being located in recess 94; engagement can then be released only by dismantling. A design of plug member for heavier duty has smaller body parts then those in light duty design, and the corresponding appliance fitting has larger mating projections (631, 69<SP>1</SP>, Figs. 16, 17, not shown). The heavy duty plug member can therefore be inserted into either design of receptacle fitting, but the light duty plug member mates only with its counterpart. Source: EPO database (ep.espacenet.com)

JP4150728: PURPOSE:To make possible to charge a battery while feeding power to an electric appliance by providing means for charging a battery to be mounted when an electric appliance is carried. CONSTITUTION:A power supply circuit 21 converts a commercial power supply V1 into a DC power supply 11 which then feeds power through a DC cable 5 to a DAT 10 body and a charging current control circuit(CCC) 23. A current detecting circuit 24 detects current flowing when the DC cable 5 is connected with the DAT 10 and the DAT 10 is operating and the current detecting circuit 24 delivers a current detection signal 12 to a timer circuit 25. Furthermore, a safety switch 28 detects mounting of 8 battery 2 and delivers a mounting detection signal C3 to the timer circuit 25. which then delivers a charge control signal C1 to the CCC 23 for a predetermined time. Consequently, the CCC 23 generates a predetermined charging current for an interval corresponding to the charge control signal C1 thus charging the battery 2. Source: EPO database (ep.espacenet.com)

JP50133804U: No Abstract Available on EPO database (ep.espacenet.com), Derwent database or Japanese Patent Office Industrial Property Digital Library (www.ipdl.ncipi.go.jp/homepg_e.ipdl)

JP61197646: Abstract (Basic): JP 61197646 A
Mercaptoalkoxysilane cpd. has pref. structure of SH(CH2)nSi(OR)3 or SHC6H4Si(OR)3, where R is 1-5C alkyl and n = 1 - 30 (e.g. mercaptopropyl trimethoxy-silane, mercaptopropyl triethoxysilane, mercaptobutyl drimethoxy-silane or mercaptophenyl trimethoxysilane). Liq. diene polymer has pref. number average mol.wt. of 300-25,000 and contains OH gp. in concn. of 0.1-10 (pref. butadiene homopolymer, homopolymer, butadiene/styrol copolymer, butadiene/isoprene copolymer, butadiene/acrylonitrile copolymer or butadiene/2-ethylhexyl acrylate copolymer).

It is prepd. by heating conjugated diene monomer and other comonomer in liq. reaction medium in presence of H2O2. Reaction of mercapto-alkoxysilane (100 pts.wt.) and liq. diene (co)polymer (10-5,000 wt.pts.) is carried out in inert solvent at 10-100 deg.C and 1-10 kg/cm2G for 0.1-10 hr. It is blended into natural rubber or synthetic resin (e.g. polybutadiene rubber, polyisoprene rubber, polychloroprene rubber, polystyrol/ butadiene rubber, polyacrylonitrile/butadiene copolymer rubber or polyisobutylene/isoprene copolymer rubber) in amt. of 5-200 PHR opt. together with crosslinking agent or vulcaniser, vulcanization accelerator, antioxidant, filler, tackifier, plasticiser, other process oil or extender oil, stabiliser, colorant, flame-retarding agent, U.V. absorber, surfactant and/or antistatic agent.

USE/ADVANTAGE - Process or extender oil blended into rubber compsn., especially into vulcanised rubber improves mechanical properties e.g. tensile strength and modulus.

Source: Derwent database

JP7307580: PURPOSE:To enable safe use of a sound device even for a baby and a child and to prevent wrong operation without breaking the sound device, without generating a large noise when it bumps against an object and without harming the object and a man even when the device is dropped or thrown. CONSTITUTION:A cover body 8 with cushioning provided with an operation window 11 for an operation button is attached to an outer part of a sound device main body 1. An air hole 13 for a speaker and a recording microphone 12 and an operation board 14 for holding a volume 2 and a tuner of a radio are provided. Thereby, even if the sound device is dropped or thrown, it is safe. It can be given to a baby or a child easily because a man does not have to tell him to handle it with care each time. Source: EPO database (ep.espacenet.com)

JP8195191: PURPOSE: To allow a dedicated battery pack for a specific electric product to be used as a power source for another portable electric product. CONSTITUTION: The main body 2 of a battery holder 1 is a flat box body formed when an upper housing 3 and a lower housing 4 divided into two are screwed by bolts. A metal hook 6 pinched and fixed between both housings 3, 4 when both housings 3, 4 are assembled is fitted on the lower housing 4 side. Base ends of a hand strap 8 are fixed on one side face in the longitudinal direction of the main body 2 by pins 7 protruded from the lower housing 4 to the upper housing 3 side. A socket section 9 connectable with a cigar lighter plug is formed on one side face in the short side direction of the main body 2, and the insertion section 11 of a battery pack and a set plate 12 closing the insertion section 11 are provided on the other side face. Source: EPO database (ep.espacenet.com)

JP8308113: PURPOSE: To supply electric power to a load from a secondary battery at the optimum voltage by charging the secondary battery at the optimum voltage by using an adapter for power supply to a charger also. CONSTITUTION: A secondary battery 1 is charged by adjusting the DC voltage of an adapter 5 by means of a DC/DC converter 2 and the output voltage of the battery 1 is supplied to a load 3 after the output voltage is regulated by means of the converter 2. The converter 2 can change the output voltage of the battery 2. The converter 2 which supplies the output voltage of the battery 1 to the load after regulation is also used to supply a voltage inputted from the adapter 5 to the battery 1 after regulation. Source: EPO database (ep.espacenet.com)

JP9051281: PROBLEM TO BE SOLVED: To receive a broadcast radio wave automatically by connecting a power failure detection circuit and a vibration sensor to a power supply changeover circuit for radio receiver driven by a home use power supply so as to detect the breakout of an earthquake. SOLUTION: A radio receiver 80 with earthquake sensing function is made up of a home use power supply input section 12, a built-in power supply 16, a power supply changeover circuit 22, a power failure detection circuit 18, a vibration sensor 62, and a radio section 14 or the like. The built-in power supply 16, the power failure detection circuit 18, the vibration sensor 62, and the radio section 14 are connected to the power supply changeover circuit 22. At interruption of power from the power supply input section 12, the detection circuit 18 of the power supply changeover circuit 22 detects it and selects the built-in power supply. Furthermore, the vibration sensor 62 detects vibration to select the built-in power supply 16 by the changeover circuit 22. Then the power supply is selected automatically and the reception of a broadcast radio wave by the built-in power supply 16 is started and the received broadcast program is broadcast from a speaker 24. Furthermore, a lamp circuit 20 is simultaneously operated to light a lighting lamp 26. Source: EPO database (ep.espacenet.com)

JP2084490U: No Abstract Available on EPO database (ep.espacenet.com), Derwent database or Japanese Patent Office Industrial Property Digital Library (www.ipdl.ncipi.go.jp/homepg_e.ipdl)

JP40007852B: No Abstract Available on EPO database (ep.espacenet.com), Derwent database or Japanese Patent Office Industrial Property Digital Library (www.ipdl.ncipi.go.jp/homepg_e.ipdl)

JP52112705U: No Abstract Available on EPO database (ep.espacenet.com), Derwent database or Japanese Patent Office Industrial Property Digital Library (www.ipdl.ncipi.go.jp/homepg_e.ipdl)

JP6268548: PURPOSE: To attain miniaturization without deteriorating assembly ease performance and sealing performance. CONSTITUTION:A case for a portable telephone set is constituted of an upper case 10 and a lower case 20. The outside of the upper case 10 and the lower case 20 is made of flexible resins 11, 21, and the inner side is made of rigid resins 12, 22. A recessed part 54 is formed to the rigid resin 22 at the end face of the lower case 20. The flexible resin forming the outer side of the upper case is formed up to its end face and inserted to the recessed part 54 of the lower case 20 as a projection 53. The flexible resin 11 forming the projection 53 acts like a seal member. Source: EPO database (ep.espacenet.com)

JP8185893: PURPOSE: To enable a standardized battery to cope with every type of equipment without any change in battery voltage and capacity by applying the constitution that a DC-DC converter is used for the charge and discharge sides of a secondary battery pack. CONSTITUTION: As a battery 1, two small sealed lead-acid batteries of 12V and 6.5Ah connected in series are, e.g. used, and the discharge side thereof is provided with a module type DC-DC converter 2 having input and output voltage respectively set to 24 V and 120V. Also, the charge side is provided with a module type DC-DC converter 3 having input and output voltage respectively set to 120V and 24V. According to this construction, an arbitrary stabilized voltage can be supplied, depending on an equipment load, without any need of changing battery voltage, capacity or the like, and a charger with a constant-voltage circuit or the like can be unnecessitated. Source: EPO database (ep.espacenet.com)

JP9200974: PROBLEM TO BE SOLVED: To make it possible to freely select a voltage of a storage battery and to enhance the power factor and efficiency of input commercial AC. SOLUTION: A DC power supply equipment is constituted using a commercial AC power supply 1, a rectifier circuit 2, a DC-DC converter 3 and a switching diode 4 as the main power source. The output power of the DC-DC converter 3 is branched to a charging circuit 6 for charging a plurality of batteries 7. Outputs from a plurality of these batteries are incorporated with the main power supply through respective switching diodes 8, backup DC-DC converter 9 and a switching diode 10. Setting voltage of the backup DC-DC converter 9 is set slightly lower than the steady-state voltage of the main power supply. Power is supplied only from the main power supply during steady state, and the backup DC-DC converter is operated under no-load condition. The DC-DC converter 9 supplies the power during power service interruption. Source: EPO database (ep.espacenet.com)

JP5031378U: Translation of Detailed Description in Specification provided by the Japanese Patent Office's Industrial Property Digital Library (www.ipdl.ncipi.go.jp/homepg_e.ipdl)

[Detailed explanation of a design]
[0001]
[Industrial Application]
This design is related with the vent hole waterproofing structure of a communication equipment case.
[0002]
[Description of the Prior Art]
The communication equipment case arranged on the outdoors secured the waterproofing engine performance using packing etc., and has prevented a rain invasion.
[0003]
However, when the communication equipment case is carrying out the temperature rise by generation of heat, solar radiation, etc. of an internal device and the outdoor wall surface of a communication equipment case is rapidly cooled by the shower etc., while the temperature of internal air falls, it falls from internal gas atmospheric pressure, and will be in a negative pressure condition. There is a possibility that water may invade from the part where waterproofing is inadequate, in this negative pressure condition like the place where the compressive force of packing is weak.
[0004]
It has prevented that generally prepare a vent hole and internal pressure declines from atmospheric pressure as an approach of preventing this.
[0005]
And in the waterproofing structure of the conventional vent hole, waterproof voice was secured using the gasket of the extension porosity matter (GOATEKKUSU; brand name) which began to be used to skiwear etc. recently well. Although gases, such as air, pass this extension porosity matter, liquids, such as water, have the property which is not passed.
[0006]
For example, as shown in drawing 3 , the gasket 13 which becomes the case external surface around the vent hole of the communication equipment case 11 from packing 14 and extension porosity material is piled up, packing and a gasket 13 are further pushed against the external surface of a case 11 with the presser-foot plate 12, it presses down with a screw 15, and a plate 12 is fixed to a case 11.
[0007]
[Problem(s) to be Solved by the Device]
However, in the conventional waterproofing structure mentioned above, a certain amount of [ the need top gasket 13 of reservation of the reinforcement of a gasket 13 ] thickness is needed. For this reason, the maximum quantity of airflow will be restricted per [ in a vent hole 16 ] unit time amount. Therefore, if the volume of a case 11 becomes large, since quantity of airflow runs short to rapid pressure variation, there is a trouble that generating of the differential pressure of case inside and outside is nonavoidable.
[0008]
Moreover, in order to prevent the differential pressure of these case inside and outside, if a vent hole is installed several places, the setting cost of waterproofing structure will go up, and there are very big problems -- the mounting tooth space between components receives constraint.
[0009]

[0010]
[Means for Solving the Problem]
Vent hole waterproofing structure of the communication equipment case concerning this design is characterized by having arranged the gasket constituted by the vent hole of a communication equipment case by carrying out the laminating of extension porosity material and the nonwoven fabric.
[0011]
[Function]
Water is not passed although air passes the extension porosity matter. In this case, the thickness of the extension porosity matter affects quantity of airflow. However, a nonwoven fabric does not influence quantity of airflow. For this reason, in this design, quantity of airflow is thinly raised for the extension porosity matter, a nonwoven fabric is thickened, and the reinforcement of a gasket is secured. Thereby, quantity of airflow can be raised.
[0012]
[Example]
Next, the example of this design is explained with reference to an attached drawing.
[0013]
The sectional view of the communication equipment case which shows the vent hole waterproofing structure of the communication equipment case which drawing 1 requires for the example of this design, and drawing 2 are expanded sectional views in which it is similarly shown near the vent hole. The wrap gasket 3 is put for ring-like packing 4 and a vent hole 6 on the vent hole 6 of the communication equipment case 1, packing 4 and a gasket 3 are pressed down on the external surface of a case 1 with the ring-like presser-foot plate 2, it presses down with a screw 5, and the plate 2 is fixed to the communication equipment case 1. Moreover, a gasket 3 has the lamination structure which carried out the laminating of extension porosity material 3a and the nonwoven fabric 3b.
[0014]
Thus, in the constituted vent hole waterproofing structure, since air passes a gasket 3, while the internal and external differential pressure of a case 1 is reduced, it is prevented that liquids, such as water, invade in a case with a gasket 3.
[0015]
It **, and the size of quantity of airflow is greatly dependent on the thickness of extension porosity material 3a, and there is almost no effect in the thickness of nonwoven fabric 3b. Therefore, the quantity of airflow per unit time amount is controllable to arbitration by changing the thickness of extension porosity material 3a. For this reason, in this example, while making extension porosity material 3a thin and making [ many ] quantity of airflow, nonwoven fabric 3b is thickened and the reinforcement of a gasket 3 is secured.
[0016]
[Effect of the Device]
As explained above, control of quantity of airflow is also easy for it by adjusting the thickness of extension porosity material while the quantity of airflow of this design per unit time amount increases by having arranged the gasket which carried out the laminating of extension porosity material and the nonwoven fabric to the waterproofing section.
Therefore, the vent hole which needed to prepare in two or more places conventionally becomes good by one place, and this design does the outstanding effectiveness so -- the degree of freedom of the mounting tooth space between components is expanded -- while being able to reduce

JP52150005: No Abstract Available on EPO database (ep.espacenet.com), Derwent database or Japanese Patent Office Industrial Property Digital Library (www.ipdl.ncipi.go.jp/homepg_e.ipdl)

JP62178632U: No Abstract Available on EPO database (ep.espacenet.com), Derwent database or Japanese Patent Office Industrial Property Digital Library (www.ipdl.ncipi.go.jp/homepg_e.ipdl)

JP9004715: PURPOSE: To enable waterproofing securely for those parts such as battery case which are frequently installed and removed by storing the annular part of waterproof members and lock tongue pieces in the groove part and stage part formed in an area of a device main body where an attachment member is installed and fixing the lock tongue piece by an indicated seal. CONSTITUTION: A waterproof packing 5 is stored in a groove part 1a formed inside a battery case installation part of a device cabinet 1. Also a stage part 1b is formed in the device cabinet 1 at a position where the lock tongue piece 5b of the waterproof packing 5 is located, continuously with the groove part 1a. Then the lock tongue piece 5b is stored in the stage part 1b, and fixed by a rated seal 6 so that it cannot be removed easily. In addition, when a battery case is installed on a main cabinet 1, the waterproof packing 5 is pressed and deformed by its end surface, and the waterproof packing is fitted closely to the groove part 1a of the main cabinet 1 to prevent the entry of water. Source: EPO database (ep.espacenet.com)

JP2063587U: No Abstract Available on EPO database (ep.espacenet.com), Derwent database or Japanese Patent Office Industrial Property Digital Library (www.ipdl.ncipi.go.jp/homepg_e.ipdl)

JP6005232U: Translation of Detailed Description in Specification provided by the Japanese Patent Office's Industrial Property Digital Library (www.ipdl.ncipi.go.jp/homepg_e.ipdl)

[Detailed explanation of a design]
[0001]
[Industrial Application]
This design contains to dedication the wireless device which uses specific smallness power wireless etc., and is related with the box contained with electrical machinery and apparatus, such as Molded Case Circuit Breaker.
[0002]
[Description of the Prior Art]
It is a body of a box (8) about the antenna attached in the wireless device (3a) as conventionally shown in drawing 5 . The hole (10) for pulling out to the exterior was processed into the body of a box.
[0003]
[Problem(s) to be Solved by the Device]
Since the whole antenna was not able to be taken out with the conventional box to the box exterior, reduction in gain was not able to be caused and the stable transmission and reception were not able to be carried out. Moreover, the time and effort which processes the hole for antenna drawers into the body of a box serves as a cause of a cost rise, and in order to process a quite big hole from it also gathering an antenna with a finger and pulling it out outside, dust goes into an inside a case, poor insulation is caused, and it is easy to cause failure of an internal device. Since ** must also make the location of the antenna attachment section of a wireless device, and the hole of the body of a box in agreement in the case of a stick antenna, after processing a hole, the attaching position of a wireless device cannot be changed. Furthermore, when an antenna is damaged, in order to have to remove and fix a wireless device, it takes time and effort.
[0004]
[Means for Solving the Problem]
This design offers the high box for wireless device receipt of versatility while it can solve each conventional technical problem and can pull out the engine performance of a wireless device enough. That is, with the configuration, it is in the thing of a box outside surface suitably attached in the part about the wireless device and the antenna in which electrical installation is possible which were contained by the body of a box.
[0005]
[Function]
Since an antenna becomes usable only by carrying out electrical installation to the wireless device of an inside a case since [ of a box outside surface ] it is suitably attached in the part and an antenna is also altogether exposed to the box exterior, there is no fall of gain and the stable communication link can be performed.
[0006]
[Example]
Drawing 1 is the explanatory view of the box for wireless device receipt concerning this design. Hereafter, this design is explained based on a drawing.

For (3a), a wireless device, (3b), (3c), and (3d) are electrical machinery and apparatus, such as a wiring breaker, and (8). The body of a box, and (7) A door is shown, respectively. (2) An end is the terminal (6) of a wireless device at **********. The other end is a connector (5). It connects respectively free [ attachment and detachment ]. (1) A ** antenna is shown, attach the end face in the direction of an arrow head free [ rotation ] at metallic ornaments (1a), and it is a connector (5). It energizes. These metallic ornaments (1a) are crevices (4) while insulating with the body of a box. A bis-stop is carried out inside, it has become removable, and exchange of an antenna is easy. moreover, connector (5) **** -- for example, what has few gain loss, such as a female mold plug or M mold plug, is used. (4) Antenna rotated as it was formed in the depth more than the diameter of an antenna at least and the crevice formed in the ****** top face showed to drawing 2 (1) It can hold now.

Thus, an antenna can be attached without processing a hole into the body of a box, and the sense of an antenna can also be changed freely. If ** can also be used in the condition of having held in the crevice and is held at the time of un-using it, it does not expose to the box exterior and is good-looking.

[0007]

Here, if a certain amount of allowances are given to the die length of a coaxial cable, even if some attaching positions of a wireless device are changed, it can respond. Moreover, a connector and a terminal can be removed and layout modification of an internal device can also be coped with by changing into a long coaxial cable.

[0008]

In addition, as long as it can rotate an antenna, without using an antenna as a flexible mold, linking with a connector directly, and limiting metallic ornaments (1a) to the thing of this example, the thing of other structures may be used.

[0009]

Moreover, it is a door (7) as shown in drawing 3 . An antenna can also be attached and the attach point is not limited. [0010]

Drawing 4 shows the modification example of this design. This is a door (7). It is a flat antenna (9) to a front face. It attaches and is a wireless device (3). Electrical installation is carried out. This flat antenna may be stuck on a door front face, and it may be laid underground so that it may not expose to a front face. Moreover, after laying underground, a door front face may be coated with a glass ingredient etc. [0011]

[Effect of the Device]

If the box for wireless device receipt concerning this design is used, since an antenna can be completely exposed to the box exterior, the communication link which did not cause the fall of gain and was stabilized can be performed. Moreover, the communication link stabilized further can be performed by making an antenna into the structure which can be rotated. ** can also cope with layout modification of about [ that the cost rise by hole processing and failure of the internal device by invasion of dust can be prevented ], and an internal device. Furthermore, a maintenance becomes easy by appearance's also becoming good and supposing that it is removable by enabling hold of an antenna.

JP7-193,444: PURPOSE: To optimize audio power according to the voltage by discriminating the voltage when plural battery packs with different voltages are properly used for each application.

CONSTITUTION: A CPU 5 judges radio reception, fetches voltage information via an A/D converter 6 and discriminates the voltage of a connected battery pack. In a memory, control data corresponding to voltage is preliminarily stored. This data is for control of an attenator 10, the attenator of the resistance value of 1 and the attenator of the resistance value of 2 are series connected, and each of them is provided with the shorting circuit by a switch. For instance, when voltage is discriminated as 9.0V in the battery pack, corresponded control data is read from the memory, the resistance value 1 of the attenator 10 is shorted via a D/A converter 7 and a setting is performed so as to be controlled by the resistance value 2. Vr day range does not change at any battery voltage because the attenator 10 controls to set maximum audio power for every voltage and desired power by a variable resistor 14. Source: EPO database (ep.espacenet.com)

It should be noted that the listing of the documents cited by Bosch does not constitute an admission that each reference constitutes prior art against the presently-pending application. Applicant has only submitted such references for the sake of completeness and to allow the Examiner to conduct his patentability review.

To discuss any aspect of this disclosure statement, or any other aspects of this application, the Examiner should call the undersigned Applicant's representative.

Conclusion

All the claims are patentable and the application is believed to be in condition for formal allowance. Accordingly, allowance of Claims 21-24 and 26-44 are respectfully requested.

The Commissioner is authorized to charge payment of the disclosure fee ($180.00), the disclaimer fee ($130.00), and any other fees due in processing this statement, or credit any overpayment to Deposit Account No. 02-2548.

Respectfully submitted,

Adan Ayala, Reg. No. 38,373
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PTO/SB/17 (12-04v2)
Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE




*Effective on 12/08/2004.*
*Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).*

# FEE TRANSMITTAL for FY 2005

☒ Applicant claims small entity status. See 37 CFR 1.27

**TOTAL AMOUNT OF PAYMENT** ($) 310

| *Complete if Known* | |
|---|---|
| Application Number | 10/758,492 |
| Filing Date | January 15, 2004 |
| First Named Inventor | Joseph Domes |
| Examiner Name | A. Gantt |
| Art Unit | 2684 |
| Attorney Docket No. | TN-09425C |

## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify) :

☒ Deposit Account Deposit Account Number: 02-2548 Deposit Account Name: Black & Decker (U.S.) Inc.

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, **except for the filing fee**

☒ Charge any additional fee(s) or underpayments of fee(s) Under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

## FEE CALCULATION

### 1. BASIC FILING, SEARCH, AND EXAMINATION FEES

| | FILING FEES | | SEARCH FEES | | EXAMINATION FEES | | |
|---|---|---|---|---|---|---|---|
| | | Small Entity | | Small Entity | | Small Entity | |
| Application Type | Fee ($) | Fee($) | Fee($) | Fee($) | Fee($) | Fee($) | Fees Paid ($) |
| Utility | 300 | 150 | 500 | 250 | 200 | 100 | ____ |
| Design | 200 | 100 | 100 | 50 | 130 | 65 | ____ |
| Plant | 200 | 100 | 300 | 150 | 160 | 80 | ____ |
| Reissue | 300 | 150 | 500 | 250 | 600 | 300 | ____ |
| Provisional | 200 | 100 | 0 | 0 | 0 | 0 | ____ |

### 2. EXCESS CLAIM FEES

| Fee Description | Fee ($) | Small Entity Fee ($) |
|---|---|---|
| Each claim over 20 (including Reissues) | 50 | 25 |
| Each independent claim over 3 (including Reissues) | 200 | 100 |
| Multiple dependent claims | 360 | 180 |

| Total Claims | Extra Claims | Fee($) | Fee Paid ($) |
|---|---|---|---|
| ____ -20 or HP= | ____ | x ____ | = ____ |

HP = highest number of total claims paid for, if greater than 20.

| Indep. Claims | Extra Claims | Fee($) | Fee Paid ($) |
|---|---|---|---|
| ____ - 3 or HP= | ____ | x ____ | = ____ |

HP = highest number of independent claims paid for, if greater than 3.

| Multiple Dependent Claims | |
|---|---|
| Fee ($) | Fee Paid ($) |
| ____ | ____ |

### 3. APPLICATION SIZE FEE

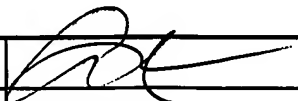
If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

| Total Sheets | Extra Sheets | Number of each additional 50 or fraction thereof | Fee ($) | Fee Paid ($) |
|---|---|---|---|---|
| ____ - 100 = | ____ | / 50 = ____ (round **up** to a whole number) x | | = ____ |

### 4. OTHER FEE(S)

| | Fees Paid ($) |
|---|---|
| Non-English Specification, $130 fee (no small entity discount) | ____ |
| Other (e.g., late filing surcharge) : Terminal Disclaimer & IDS | $310 |

## SUBMITTED BY

| | | | | | |
|---|---|---|---|---|---|
| Signature |  | Registration No. (Attorney/Agent) | 38,373 | Telephone | 410-716-2368 |
| Name (Print/Type) | Adan Ayala, Esq. | | | Date | June 24, 2005 |